COASTAL CONSERVANCY

Staff Recommendation
January 27, 2005

CALIFORNIA CURRENT MARINE CONSERVATION PROJECT

File No. 04-098
Project Manager: Ann Buell/Carol Arnold

RECOMMENDED ACTION: Authorization to disburse up to $300,000 to PRBO Conservation Science to implement the California Current Marine Conservation Project, including establishment of a California Current Joint Venture, participation in the Pacific Coast Ocean Observing System partnership, and continued research on fish, bird and mammal populations within marine currents off the California coast.

LOCATION: Based at PRBO Conservation Science in Marin County and focused on the California Current System (CCS), which extends along the coast from northern Baja to southern British Columbia. The CCS is biologically linked to nearshore and onshore California coastal habitats (Exhibit 1: Project Location and Site Map).

PROGRAM CATEGORY: Integrated Coastal and Marine Resources Protection

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EXHIBITS

Exhibit 1: Project Location and Site Map

Exhibit 2: Potential Members of California Current Joint Venture

Exhibit 3: Data Collection Locations

Exhibit 4: Photographs

Exhibit 5: Members of PaCOOS Governing Board

Exhibit 6: Letters of Support

RESOLUTION AND FINDINGS:

Staff recommends that the State Coastal Conservancy adopt the following resolution pursuant to Section 31220 of the Public Resources Code:

"The State Coastal Conservancy hereby authorizes the disbursement of an amount not to exceed three hundred thousand dollars ($300,000) to PRBO Conservation Science to implement the California Current Marine Conservation Project, including establishment of a California Current Joint Venture, participation in the Pacific Coast Ocean Observing System partnership, and continued research on fish, bird and mammal populations within the California Current System.

Prior to disbursement of any Conservancy funds, PRBO Conservation Science shall submit for review and approval of the Executive Officer of the Conservatory a detailed work program, timeline, and budget; and the names and qualifications of any intended contractors."

Staff further recommends that the Conservancy adopt the following findings:

"Based on the accompanying staff report and attached exhibits, the State Coastal Conservancy hereby finds that:

1. The proposed project is consistent with the purposes and criteria set forth in Chapter 5.5 of Division 21 of the California Public Resources Code (Section 31120) regarding Integrated Coastal and Marine Resources Protection.
2. The proposed project is consistent with the Project Selection Criteria and Guidelines adopted by the Conservancy on January 24, 2001.
3. Point Reyes Bird Observatory (PRBO Conservation Science) is a nonprofit organization existing under Section 501(c)(3) of the U.S. Internal Revenue Code, and whose purposes are consistent with Division 21 of the California Public Resources Code."

PROJECT SUMMARY:

This project will result in implementation of the California Current Marine Conservation Project by PRBO Conservation Science (PRBO) (a nonprofit organization originally founded as the Point Reyes Bird Observatory). The components of the project are: (1) creation of a California Current Joint Venture (CCJV); (2) participation in the Pacific Coast Ocean Observing System (PaCOOS) partnership and; (3) continued research focused on fish, bird and mammal populations within the California Current System. These components are more fully described below.

Degradation of ocean resources has become an issue of major concern among the world's scientific community. The Pew Oceans Commission and the U.S. Commission on Ocean Policy recently completed reports evaluating the health of marine ecosystems (May 2003, July 2004, respectively). Both of these documents produced alarming evidence of degraded marine ecosystems which, without intervention, could have devastating environmental, economic and social consequences on human populations. Among other recommendations, these reports make a strong case for modifying ocean management and policy infrastructure and encouraging conservation-based resource decisions to reverse these trends.

One of the obstacles to establishing collaborative ocean management and policy decisions is the historic lack of coordination among the many agencies and organizations that have responsibility for these functions. Additionally, ongoing research is needed to provide integrated information about ocean current ecosystems to resource managers so that decisions are based upon sound science. This critical link between science and implementation is largely absent today.

In order to help address these issues, PRBO initiated the California Current Marine Conservation Project (CCMCP), focused on the marine currents that extend along the Pacific Coast from northern Baja to southern British Columbia. Referred to as the California Current System (CCS), this is a highly productive ecosystem supporting marine bird, fish and wildlife

communities. This project will implement the CCMCP and consists of the following three elements, the first of which will be funded by the Conservancy for its California component.

(1) Creation of a California Current Joint Venture: PRBO will establish a non-regulatory, voluntary coalition that will help bridge cultural and cross-jurisdictional barriers in ocean management to achieve more integrated conservation-oriented management practices within the CCS. The California Current Joint Venture (CCJV) (Exhibit 2: Potential Members of CCJV) will include government, nonprofit organizations and industry partners from California, Oregon, Washington, Mexico and Canada, as well as U.S. government representatives, and will provide a critical link between scientific research and implementation of management practices and policies.

The vision of PRBO is to bring commercial and recreational fisheries, regulatory agencies, oil companies, shipping interests, scientists, environmental advocates and other stakeholders together to protect food webs and habitats that support marine wildlife; promote biodiversity conservation, healthy fisheries, and human health; support the marine economy; and promote public stewardship of the rich marine environments within the CCS. The CCJV will provide a forum for mitigating impacts of fisheries, shipping, pollution and other human activities on marine environments.

PRBO will assure that all essential data is collected and utilized by the CCJV from relevant research entities, including PaCOOS (described below), and the two California regional partnerships (the Southern California Coastal Ocean Observing System and the Central and Northern Coastal Ocean Observation System) to be designed and implemented with funds from previous Conservancy grants to Scripps Institution of Oceanography, U.C. San Diego, and San Francisco State University.

The Conservancy will fund PRBO participation in the CCJV for a two-year period during which PRBO expects at least one pilot project to be initiated. PRBO will provide year-end reports describing and evaluating the work and accomplishments of the CCJV, and establishing future action plans. PRBO expects that following the first two years, the CCJV will be jointly funded by the participants.

(2) Conservation Science Research for the California Current System: Operating from its marine base at the Farallon Islands National Wildlife Refuge, PRBO has conducted scientific research throughout the CCS for over 30 years (Exhibit 3: Data Collection Locations and Exhibit 4: Photographs). The organization has produced the longest-running datasets on marine birds and marine mammals in North America, yielding critical insights into human-caused and natural changes over time. PRBO focuses its research efforts on the distribution and abundance of top marine predators in conjunction with studies of their prey and physical oceanographic conditions. Top predators such as seabirds, whales, seals, sea lions, sea turtles and large fish are valuable bio-indicators of ocean health.

Although PRBO's efforts to date are invaluable, more research is needed to broaden the scientific understanding of the role offshore ocean habitats and processes play in maintaining healthy fisheries and marine wildlife. To help fill this gap, PRBO will continue its research by collecting, analyzing, and synthesizing data to identify areas of high biological productivity that support the top level predators of the marine realm; develop and apply seabird-fisheries ecology models to enhance fisheries management;

and finalize its California Coastal System Marine Bird Conservation Plan to guide managers.

(3) Participation in the Pacific Coastal Ocean Observing System (PaCOOS): In 2002, scientists from west coast academic institutions, foundations, and agencies gathered at a series of community meetings to determine how best to develop a marine observation system that would support management of natural resources within the CCS. As a result, NOAA Fisheries led the formation of a scientific partnership (Exhibit 5: PaCOOS Board of Governors) to be the west coast contribution to the national Integrated Ocean Observing System. PRBO is on the Board of Governors of PaCOOS and will continue this role throughout the scope of this project, providing scientific guidance and helping to set consistent ocean observation protocols within the CCS. PaCOOS focuses primarily on biological data, and its geographic range extends across the entire CCS, distinguishing it from the California-based observing system partnerships mentioned above. PaCOOS will coordinate closely with the California partnerships.

This project will help carry out Conservancy goals relating to coastal and marine resource protection by providing the necessary data and coordination to help restore fish and wildlife habitat within coastal and marine waters, reduce threats to coastal and marine fish and wildlife, and diminish the impact of economic pressures on coastal and marine resources.

Founded as the Point Reyes Bird Observatory in 1965, PRBO is well positioned to carry out this project. Its staff works with hundreds of governmental, nonprofit, and private resource managers to enhance biodiversity throughout western North American and the vast North Pacific Ocean. Staff have conducted research throughout the CCS for over 30 years. In addition to their extensive scientific research, PRBO staff have wide-ranging experience establishing and managing collaborative conservation efforts. Among other functions in this regard, they currently manage the financial infrastructure of both the Riparian Habitat Joint Venture and the San Francisco Bay Joint Venture.

Site Description: As with all ocean environments, the CCS is composed of linked heterogeneous habitats related to the interplay of bottom topography, coastal topography, and water movements. Stretching from southern British Columbia to Baja California and out 200 miles, the CCS is one of five highly productive eastern boundary currents on the planet. The CCS is a major "feeding trough" of the northern Pacific Ocean for millions of marine birds, mammals, and fish, including many far-ranging migratory species.

Residents of California, Oregon, and Washington depend upon living marine resources of the CCS for food, jobs, recreation, tourism, medicine, and a myriad of industrial and commercial products. Among important commercial and sport fish that inhabit the CCS are various salmonids that depend upon prey species such as juvenile rockfish during their ocean going phase. Salmonids are closely linked to onshore watersheds to complete their reproductive cycle.

Healthy marine ecosystems within the CCS are critical to sustain human populations that depend upon them for food and other life essentials. Particularly important to the viability of these ecosystems are the existence of pelagic "hot spots," areas of high ocean productivity containing prey or other food sources such as krill and small fish that attract large numbers of predators such as whales, seals, sea lions, seabirds, sea turtles, and large fish. These areas are associated with coastal promontories, underwater sea mounts, sills, and canyons, as well as highly dynamic and ephemeral habitats associated with currents.

Pelagic "hot spots" are likely important retention areas for juvenile fishes and invertebrate larvae that eventually settle in the nearshore environment. The predator-prey relationships offshore have significant effects on the survival of important nearshore animals, as well as those species that spawn in onshore rivers and streams.

Project History: Responding to major concerns by scientists and policy makers regarding the health of the world's oceans, in June, 2004 the Conservancy authorized the acceptance of a $7,000,000 grant from the State Water Resources Control Board for implementation of the Coastal Oceans Current Monitoring Program (Program), and disbursed up to $10,200,000 to Scripps Institution of Oceanography, U.C. San Diego, and San Francisco State University to implement the Program. This is a collaborative statewide program to monitor and map the surface currents of the coast of California. Two California partnerships, the Southern California Ocean Observing System and the Central and Northern Ocean Observing System, will implement the observing systems designed for their respective areas off the California coast.

PRBO has built upon these ongoing efforts by bringing together dozens of governmental and non-governmental agencies and scientists as an initial step toward forming a multi-stakeholder conservation implementation partnership. These meetings resulted in a consensus to move forward with the creation of a joint venture management board and informal working groups were formed to begin addressing some priority technical issues.

Additionally, PRBO continues to fill data gaps by focusing research on biological resources within the entire range of the California Current System. Specifically, PRBO scientists are mapping the distribution and abundance of top marine predators and their prey by season and year to determine which characteristics make certain areas and time periods more productive and attractive to these species. This research will continue under the proposed project and will lead to the development of management recommendations to promote the conservation of marine species.

Finally, PRBO is represented on the governing board of PaCOOS, playing an important role in gathering and disseminating scientific data relevant to the marine environment of the CCS. As part of this effort, PRBO coordinates with all research institutions and partnerships undertaking scientific studies within the CCS, including the California-based observing systems previously funded by the Conservancy. This coordination will facilitate efficient retrieval and use of scientific data by managers and policy makers within the anticipated CCJV.

PROJECT FINANCING:

Pending:	
Coastal Conservancy	$300,000*
Resources Legacy Fund Foundation	100,000
Expected:	
Moore Family Foundation	30,000
Marisla Foundation	60,000
National Fish & Wildlife Foundation	100,000
Resources Legacy Fund Foundation	100,000
Total Project Cost	**$690,000**

* Conservancy funds will be used for the California component of the California Current Joint Venture for a period of two years.

The expected source of Conservancy funds for this project is the fiscal year 2004-2005 appropriation from the California Beach and Coastal Enhancement Account, California Environmental License Plate Fund. The Environmental License Plate Fund account may be used for the purposes of coastal natural resource and enhancement projects, as well as other projects consistent with Division 21 of the Public Resources Code (Vehicle Code Section 5067(c)(1)(B)). As discussed in detail below, the project is consistent with Chapter 5.5 of Division 21.

CONSISTENCY WITH CONSERVANCY'S ENABLING LEGISLATION:

This project would be undertaken pursuant to Chapter 5.5 of the Conservancy's enabling legislation, Division 21 of the Public Resources Code, regarding integrated coastal and marine resources protection. Consistent with Section 31220(a), the Conservancy has consulted with the State Water Resources Control Board in the development of this project to ensure consistency with Chapter 3 (commencing with Section 30915) of Division 20.4 of the Public Resources Code. Under Section 31220, the Conservancy may undertake projects that meet any of the objectives specified in subsection (b) of that section. Consistent with Section 31220(b), the proposed project will (1) help protect fish and wildlife habitat within coastal and marine waters by facilitating research on marine predators and their prey; (2) provide for monitoring and mapping of marine habitats and marine wildlife in order to facilitate the protection of anadromous fish, which utilize both open ocean waters and rivers and streams within the coastal zone; and (3) help reduce the impact of population and economic pressures on coastal and marine resources by establishing the California Current Joint Venture to stimulate conservation of resources within the California Current System that have been impacted by various economic activities. As required by Section 31220(c), the project will include an evaluation component through the preparation and submittal of year-end reports by PRBO on the activities, accomplishments, and future goals of the California Current Joint Venture. As also required by Section 31220(c), the project is consistent with state and regional watershed planning as described below under "Consistency with Local Watershed Management Plan/State Water Quality Control Plan."

CONSISTENCY WITH CONSERVANCY'S STRATEGIC PLAN GOAL(S) & OBJECTIVE(S):

Consistent with **Goal 6, Objective A,** the proposed project will result in improved habitat for anadromous fish through the implementation of conservation-based management practices among resource agencies participating in the California Current Joint Venture. Salmonids are anadromous fish that are part of the complex food chain within the California Current System and that utilize coastal rivers and streams to complete their reproductive cycle.

CONSISTENCY WITH CONSERVANCY'S PROJECT SELECTION CRITERIA & GUIDELINES:

The proposed project is consistent with the Conservancy's Project Selection Criteria and Guidelines adopted January 24, 2001, in the following respects:

Required Criteria

1. **Promotion of the Conservancy's statutory programs and purposes:** See the "Consistency with Conservancy's Enabling Legislation" section above.
2. **Consistency with purposes of the funding source:** See the "Project Financing" section above.
3. **Support of the public:** The project is supported by numerous legislators, research institutions, and government agencies. Letters of support are attached as Exhibit 6.
4. **Location:** The project will be administered by PRBO, based in Marin County, and will focus on the offshore ocean currents of the coasts of California, Oregon, and Washington with links to the portion of the California current ecosystem occurring in Canadian and Mexican waters. These ocean currents are known as the California Current System (CCS) and are biologically linked to nearshore and onshore California coastal habitats. Conservancy funding will be limited to the California component of the California Current Joint Venture.
5. **Need:** As human populations have expanded, commercial and recreational uses of ocean resources have contributed to the depletion of marine fish and wildlife species. There is a great need for continued research to assess the functions of and relationships within marine ecosystems and to articulate and implement conservation-based resource management strategies. The proposed project incorporates both research and management components to address resource issues within the CCS.
6. **Greater-than-local interest:** A California Current Joint Venture (CCJV) will address ocean issues that affect a large portion of the Pacific Coast, including the entire California coast. Additionally, continued data collection on ocean predator and prey species by PRBO will contribute to greater scientific understanding of the marine ecosystems within the CCS.

Additional Criteria

7. **Urgency:** PRBO has coordinated with representatives from government agencies, industry and environmental groups to prepare for the formation of the CCJV. These

representatives have expressed an interest in participating in the CCJV and are expecting follow-up within the next several months. In order to sustain this momentum, PRBO must move forward in a timely manner.

8. **Resolution of more than one issue:** PRBO expects that the CCJV will address a variety of management issues, including resource needs, industry concerns, and recreational uses of ocean resources.

9. **Leverage:** See the "Project Financing" section above.

11. **Innovation:** PRBO has established a very innovative and cost-effective science program by joining ongoing ship-based fisheries research cruises to collect information on the distribution and abundance of top marine predators in conjunction with studies of their prey and physical oceanographic conditions. Additionally, PRBO's leadership in establishing a joint venture that will coordinate management and policy decisions based upon sound science is an innovative approach to resolving historic problems that have contributed to the degradation of ocean resources.

12. **Readiness:** PRBO is securing funding for this project and has organized informal work groups that are ready to assume responsibility for the formation of the CCJV. Research is ongoing and will be continued. PRBO is a member of the governing board of PaCOOS.

13. **Realization of prior Conservancy goals:** "See "Project History" above.

15. **Cooperation:** This project will be a collaborative effort among scientists, resource managers, industry representatives, and policy makers. A major function of the CCJV will be to promote cooperation among all relevant parties toward the goal of marine resource sustainability within the CCS.

CONSISTENCY WITH THE COASTAL ACT:

Article 4 of Chapter 3 of the Coastal Act (Public Resources Code Sections 30230-30237) sets forth policies for the marine environment. Section 30230 provides: "Marine resources shall be maintained, enhanced, and where feasible, restored…. Use of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes." The creation of a California Current Joint Venture will help assure that managers and policy makers will be able to make decisions based upon science, and that conservation principles will be used to help sustain the fish and wildlife utilizing habitats within the California Current System. Section 30231 states: "The biological productivity of coastal waters…appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored…." The goal of the proposed project is to provide scientific data and develop management systems that will help maintain the biological productivity of the California Current System, which is the source of food and other life-sustaining products for the human population of the coast and elsewhere.

CONSISTENCY WITH LOCAL WATERSHED MANAGEMENT PLAN/ STATE WATER QUALITY CONTROL PLAN:

The inherent intent of local coastal watershed management plans is to prevent water quality degradation and to protect the beneficial uses of coastal waters. Water quality control plans adopted by the State Water Resources Control Board are designed to focus resources on key issues, promote the use of sound science, and promulgate cooperative, collaborative efforts in coastal areas to protect and enhance coastal waters. As a collaborative program that includes coastal waters of California, PRBO's California Current Marine Conservation Project will contribute to the scientific information pool that supports the development of water quality standards in coastal areas.

COMPLIANCE WITH CEQA:

Under 14 California Code of Regulations (CCR) Section 15262, feasibility and planning activities are categorically exempt from California Environmental Quality Act (CEQA) review. Establishing the California Current Joint Venture and participation in the Pacific Coast Ocean Observing System partnership are planning activities. Similarly, 14 CCR Section 15306 exempts basic data collection, research, and resource evaluation activities that do not result in a serious or major disturbance to an environmental resource. The grantee will engage in ship-based data collection and resource evaluation that will not cause major disturbance to marine resources for the purpose of informing the CCJV and other planning entities and to encourage resource conservation within the CCS. Staff will file a CEQA Notice of Exemption upon Conservancy approval of the project.